

Permit Fact Sheet

General Information

Permit Number:	WI-0066605-01-0	
Permittee Name:	Wisconsin Dunes LLC, dba Sand Valley Clubhouse and Lodge, 1697 Leopold Way, Nekoosa, WI 54457	
Discharge Location:	NE1/4, SE1/4, Section 26 T20N R5E, Town of Rome, Adams County, WI	
Receiving Water:	the groundwaters of the Wisconsin Rapids Watershed in the Upper Wisconsin River Basin, in Adams County, WI	
StreamFlow (Q _{7,10}):	N/A	
Stream Classification:	N/A	
Design Flow(s)	Annual Average	0.035 MGD
Significant Industrial Loading?	No industrial loading	
Operator at Proper Grade?	N/A	
Approved Pretreatment Program?	N/A	

1 Facility Description

Wisconsin Dunes LLC. owns and operates a private on-site wastewater treatment system (POWTS) at the Sand Valley Clubhouse and Lodges facility in Nekoosa, WI. The annual average design flow of the POWTS is 0.035 MGD. The permittee estimates that the actual annual average daily discharge has been far lower than that however, at approximately 0.0045 MGD. For the last two years the facility has been regulated under General Permit (GP) WI-0062901-03, “Domestic Wastewater to a Subsurface Soil Absorption System”. However, because of the potential size of the system, the Department intends to switch coverage from the GP to an individual WPDES permit.

The wastewater treatment system consists of a 38,000 gallon settling (septic) tank to remove heavier solids, followed by a 38,000 gallon equalization tank. From the equalization tank, the wastewater is sent with restricted, timed flow and dosing into the 38,000 gallon advanced pretreatment tank, a Fixed Activated Sludge Treatment (FAST) system for biological, aerobic treatment of the wastewater. From the FAST treatment the wastewater is further treated in a 10,000 gallon polishing tank prior to entering an 18,000 gallon dosing tank, where the wastewater is dispersed out to the seven subsurface soil infiltration zones (aka, drain fields). Final treatment of the wastewater occurs via chemical and biological means as it moves through the soil column. Solids from the septic tanks are removed on a regular basis and hauled by a licensed septage hauler for disposal.

Sample Point Designation		
Sample Point Number	Discharge Flow, Units, and Averaging Period	Sample Point Location, WasteType/sample Contents and Treatment Description (as applicable)
701	0.0045 MGD (estimated average as reported by permittee)	Representative influent samples shall be collected from the settling tank or the next upstream manhole.

Sample Point Designation		
Sample Point Number	Discharge Flow, Units, and Averaging Period	Sample Point Location, WasteType/sample Contents and Treatment Description (as applicable)
001	0.0045 MGD (estimated average as reported by permittee)	Representative effluent samples shall be collected from the dosing tank prior to discharge to the subsurface soil absorption system. Effluent flow shall be measured as the total forward flow dosed to the subsurface soil absorption system as measured by run time meters and event counters.
990	Flow is not a required parameter	All solids from the septic tank shall be managed in compliance with chapter NR 113, Wisconsin Administrative Code for Servicing Septic or Holding Tanks, etc.

2 Influent - Proposed Monitoring

Sample Point Number: 701- Influent to Treatment Plant

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
BOD5, Total		mg/L	Quarterly	Grab	
Nitrogen, Organic Total		mg/L	Quarterly	Calculated	
Nitrogen, Ammonia (NH3-N) Total		mg/L	Quarterly	Grab	
Nitrogen, Total		mg/L	Quarterly	Calculated	
Solids, Total Dissolved		mg/L	Quarterly	Grab	
Chloride		mg/L	Quarterly	Grab	

Explanation of Limits and Monitoring Requirements

Influent monitoring is needed to assess loading to the facility and treatment performance. The required parameters and sampling frequency are appropriate for a land treatment system (ch NR 206, Wis. Adm. Code).

3 Land Treatment – Proposed Monitoring and Limitations

Sample Point Number: 001- Effluent to Subsurface Soil Absorption System at Dosing Tank

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Daily	Total Daily	
BOD5, Total		mg/L	Quarterly	Grab	
Nitrogen, Organic Total		mg/L	Quarterly	Calculated	
Nitrogen, Ammonia (NH3-N) Total		mg/L	Quarterly	Grab	
Nitrogen, Total		mg/L	Quarterly	Calculated	
Solids, Total Dissolved		mg/L	Quarterly	Grab	
Chloride		mg/L	Quarterly	Grab	

Explanation of Limits and Monitoring Requirements

Monitoring requirements are based on NR 206.09 Wis. Adm. Code. See the March 4, 2021 groundwater evaluation referenced below in the “Other Comments” section for more information.

4 Septage Management - Proposed Monitoring and Limitations

Septage management is required in accordance ch. NR 113, Wisconsin Administrative Code. Records must be kept and made available to the Department on request. Required record keeping includes volumes of septage pumped, dates when the septage was removed, land application site DNR number and method used to satisfy pathogen and vector control, and/or the treatment plant where septage is disposed. Annual reporting is required when the permittee land applies the septage. Annual reporting is also required when the permittee disposes of septage at a designated treatment facility.

Sample Point Number: 990- Solids

Explanation of Limits and Monitoring Requirements

Septage management is required in accordance with ch. NR 113, Wisconsin Administrative Code. Records must be kept and made available to the Department on request. Required record keeping includes volumes of septage pumped, septage facility handling septage, and dates when the septage was removed. Land application records will be kept by the septage facility applying the waste according to NR 113, Wis. Adm. Code and will apply on fields approved for the septage facility. Annual reporting will be completed by the septage facility hauling the waste.

5 Compliance Schedules

Explanation of Compliance Schedules

N/A

Special Reporting Requirements

N/A

Other Comments:

Given the estimated daily average flow, a groundwater monitoring well system is not required in this permit term. For information and justification for this decision, see the March 4, 2021 memo from Woody Myers to File titled “Sand Valley Clubhouse and Lodge POWTS – Groundwater Evaluation Report, WPDES Permit # WI-0066605-01”.

This facility is exempt from operator certification under NR 114.52(22)(a). However, because the facility is an activated sludge system it is recommended the operator be certified.

Attachments:

Proposed Expiration Date:

March 31, 2026

Justification Of Any Waivers From Permit Application Requirements

N/A

Prepared By: Holly Heldstab Wastewater Specialist

Date: 04/06/2021

cc: None